

Abstract of the Invention

A method of preparing a parametric speaker transducer for (i) generating sonic or subsonic audio output by propagating two frequencies having a difference in value equal to the desired sonic or subsonic audio output and (ii) decoupling the two frequencies to generate the desired audio output, the method comprising the steps of:

- a. positioning an electrically sensitive, mechanically responsive film over at least one closed-end cavity of a rigid support member within a pressure chamber;
- b. applying a pressure differential within the chamber to provide a common cavity pressure substantially different from ambient pressure;
- c. sealing the film to the support member while within the pressure chamber to capture the cavity pressure in a permanent configuration; and removing the sealed film and support member from the pressure chamber, thereby distending the film into an arcuate emitter configuration with respect to the at least one cavity in response to a pressure differential between cavity pressure and ambient pressure on opposing sides of the film to enable constricting and extending of the emitter configuration in response to variations in an applied electrical input at the piezoelectric film to thereby create a compression wave in a surrounding environment. A structural device for implementing this method is also disclosed.